AWARD NUMBER: **W81XWH-14-1-0236**

TITLE: Hippocampal and Cognitive Function, Exercise, and Ovarian Cancer: A Pilot Study

PRINCIPAL INVESTIGATOR: Richard Sloan, PhD

CONTRACTING ORGANIZATION: Columbia University
New York, NY 10032-3702

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14. ABSTRACT

In this application, we propose to address this problem by focusing primarily on a single post-chemotherapy complaint in a single cancer: problems with memory in patients with ovarian cancer. We focus on this problem for three reasons: 1) according to the Ovarian Cancer National Alliance, memory problems are among the most frequently cited by patients; 2) by narrowly targeting our inquiry, we will avoid the "noise" in the data associated with different treatment regimens and correspondingly different cognitive complaints and; 3) there are decades of neuroscience research, some of it from our group, indicating that memory impairment, such as the kind reported in the context of chemotherapy, is mediated primarily by a region of the brain called the hippocampus. In this application, we propose to investigate the possibility that standard chemotherapy regimen used to treat ovarian cancer leads to memory impairment because it arrests the normal processes of neurogenesis, the growth of new nerve cells, in this brain region. In addition, because a growing body of research studies shows that physical exercise leads to improvement in memory and learning and that exercise targets the same brain regions responsible for chemotherapy-induced memory problems, we propose to conduct a pilot study of an intervention to increase patients' physical activity to test whether this will slow this effect of chemotherapy on nerve cell growth in the hippocampus and subsequently offset memory decline.

15. SUBJECT TERMS

Nothing listed

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
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"Hippocampal and Cognitive Function, Exercise, and Ovarian Cancer: A Pilot Study"
Proposal Log Number OC130386
Award Number W81XWH-14-1-0236
HRPO Log Number A-18125
Reporting Period: 8/1/15 – 7/31/16

1 INTRODUCTION:

In this application, we propose to address this problem by focusing primarily on a single post-chemotherapy complaint in a single cancer: problems with memory in patients with ovarian cancer. We focus on this problem for three reasons: 1) according to the Ovarian Cancer National Alliance, memory problems are among the most frequently cited by patients; 2) by narrowly targeting our inquiry, we will avoid the "noise" in the data associated with different treatment regimens and correspondingly different cognitive complaints and; 3) there are decades of neuroscience research, some of it from our group, indicating that memory impairment, such as the kind reported in the context of chemotherapy, is mediated primarily by a region of the brain called the hippocampus. In this application, we propose to investigate the possibility that standard chemotherapy regimen used to treat ovarian cancer leads to memory impairment because it arrests the normal processes of neurogenesis, the growth of new nerve cells, in this brain region. In addition, because a growing body of research studies shows that physical exercise leads to improvement in memory and learning and that exercise targets the same brain regions responsible for chemotherapy-induced memory problems, we propose to conduct a pilot study of an intervention to increase patients' physical activity to test whether this will slow this effect of chemotherapy on nerve cell growth in the hippocampus and subsequently offset memory decline.

2 KEYWORDS:

Physical activity interventions, ovarian cancer treatment, chemotherapy-induced cognitive dysfunction

3 ACCOMPLISHMENTS:

Major Goals/Objectives:

1. Approval by CUMC Herbert Irving Comprehensive Cancer Center (HICCC) Protocol Review and Monitoring Committee
   Date of Completion: 4/17/14 (100% completed)

1A. Approval of HICCC protocol materials by DoD HRPO; Respond to DoD HRPO questions
   100% completed

2. Approval by New York State Psychiatric Institute (NYSPI) Institutional Review Board
   Date of Completion: 5/15/15 (100% completed)

2A. Approval of NYSPI IRB materials by DoD HRPO; Respond to DoD HRPO questions
   Date of Completion: June 1, 2015 (100% completed)

3. Training research assistant "coach" in patient recruitment, retention, delivery of walking intervention
   Date of Completion: July 1, 2015 (100% completed)

4. Training research assistant in administration and scoring of neuropsychology tests
   Date of Completion: July 1, 2015 (100% completed)

5. Training research assistant in image analysis
   Date of Completion: July 1, 2015 (100% completed)

6. Recruiting 21 ovarian cancer patients 4-6 weeks post-surgery
   July 31, 2016: 5% completed

7. Pre- and post-intervention neuropsychology and imaging data collection and scoring
   July 31, 2016: 5% completed

8. Delivering the interventions to the two treatment groups

August 1, 2016: 5% completed

9.Data analysis

July 31, 2016: 5% completed

10.Post-Analysis: Submission of findings to national meetings, proposal to DoD or NIH for definitive study (if appropriate)

July 31, 2016: 0% completed

What was accomplished under these goals?

This is a study to assess the feasibility of recruiting ovarian cancer patients in a pilot study to assess the impact of increasing physical activity on neuropsychological and brain imaging outcomes. The principle finding to date is that due to changing treatment protocols, it is extremely difficult to recruit patients into the study. To date, we have screened 883 post-operative patients and have recruited only 1. With the exception of 4 patients, all others failed to meet inclusion/exclusion criteria. Of the 4 who met criteria, only one agreed to participate.

What opportunities for training and professional development has the project provided?

Nothing to report

How were the results disseminated to communities of interest?

Nothing to report

What do you plan to do during the next reporting period to accomplish the goals?

We have expanded our potential pool of patients to those with endometrial and uterine cancers in the hope that we will be able to recruit more patients.

IMPACT:

What was the impact on the development of the principal discipline(s) of the project?

Nothing to report

What was the impact on other disciplines?

Nothing to report

What was the impact on technology transfer?

Nothing to report

What was the impact on society beyond science and technology?

Nothing to report

CHANGES/PROBLEMS:

Changes in approach and reasons for change

To increase recruitment, we have opened enrollment to endometrial and uterine cancer patients.

Actual or anticipated problems or delays and actions or plans to resolve them

As this is a feasibility study, we have encountered significant problems with recruitment, due in large part to changes in treatment protocols.

Changes that had a significant impact on expenditures

Nothing to report

Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

IRB approval to recruit endometrial and uterine cancer patients: January 16, 2016
IRB approval to recruit patients receiving both chemotherapy and radiotherapy: May 27, 2016

Significant changes in use or care of human subjects

IRB approval to recruit endometrial and uterine cancer patients: January 16, 2016
IRB approval to recruit patients receiving both chemotherapy and radiotherapy: May 27, 2016

Significant changes in use or care of vertebrate animals.

Nothing to report

Significant changes in use of biohazards and/or select agents

Nothing to report

PRODUCTS:

Publications, conference papers, and presentations:

Journal publications.

Nothing to report

Books or other non-periodical, one-time publications.

Nothing to report

Other publications, conference papers, and presentations.

Nothing to report

Website(s) or other Internet site(s)

Nothing to report

Technologies or techniques

Nothing to report

Inventions, patent applications, and/or licenses

Nothing to report

Other Products

Nothing to report

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS:

What individuals have worked on the project?

Name:	***Richard Sloan, PhD***
Project Role:	*Principal Investigator*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*1*
Contribution to Project:	*Dr. Sloan is responsible for all aspects of the study including recruitment of patients, oversight of the activity-increasing program, and data analysis.*
Funding Support:	*This project*.
Name:	***Scott Small, MD***
Project Role:	*Co-Investigator*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*1*
Contribution to Project:	*Dr. Small supervises all aspects of the imaging within the proposed project and provides some supervision for the half-time Research Assistant in scoring the imaging data.*
Funding Support:	*This project*.

Name:	***Adam Brickman, PhD***
Project Role:	*Co-Investigator*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*1*
Contribution to Project:	*Dr. Brickman will oversee the neuropsychological evaluation of participants in the study, including training study personnel on task administration, scoring, quality assurance, and data entry.*
Funding Support:	*This project.*
Name:	***Jason Wright, MD***
Project Role:	*Co-Investigator*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*1*
Contribution to Project:	*Dr. Wright will be responsible for patient recruitment as well as medical oversight for patients recruited to the study.*
Funding Support:	*This project.*
Name:	***Jose Henriquez-Rivera***
Project Role:	*Research Assistant*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*12*
Contribution to Project:	*Mr. Henriquez-Rivera is the study "coach" and his responsibilities include patient recruitment, retention, delivery of walking intervention.*
Funding Support:	*This project.*
Name:	***Brianna Last***
Project Role:	*Research Assistant*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*2*
Contribution to Project:	*Administering and scoring neuropsychological tests under Dr. Brickman's supervision.*
Funding Support:	*This project.*
Name:	***Christiane Hale***
Project Role:	*Research Worker*
Researcher Identifier (e.g. ORCID ID):	*n/a*
Nearest person month worked:	*1*
Contribution to Project:	*Administering and scoring neuropsychological tests under Dr. Brickman's supervision.*

Funding Support:	*This project.*

Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

Yes, other support attached.

What other organizations were involved as partners?

Nothing to report

SPECIAL REPORTING REQUIREMENTS:

n/a

APPENDICIES

n/a

Richard Sloan

Dr. Sloan has an appointment at the New York State Psychiatric Institute/Research Foundation for Mental Hygiene and Columbia University. This is detailed in a Dual Appointment Agreement between the entities and precludes the possibility of NYSPI/RFMH supporting effort supported by Columbia University and vice versa. Therefore, each project listed below indicates effort at each institution and also Total Professional Effort ('TPE') encompassing the multiple appointments.

Columbia University Active

5R01HL128310-02 (Edmondson) 7/15/2015 - 3/31/2019 0.60 CM
NIH/NHLBI TPE 0.49 CM
Test of a new theory to explain excess risk in cardiac PTSD
The goal of the proposed research is to identify targets for new interventions to reduce the doubled cardiac event recurrence and mortality risk faced by the 1 in 8 survivors of non-ST elevation myocardial infarction and unstable angina who develop PTSD secondary to their life-threatening cardiac event.
Role: Co-Investigator

2P01AG003949-32 (Lipton) 9/1/2017 - 5/31/2021 1.80 CM
Albert Einstein College of Medicine (NIH) TPE 1.47 CM
Einstein Aging Study
To identify risk factors and protective factors that influence both normative cognitive aging and the earliest onset of Alzheimer's Disease.
Role: Subcontract - Principal Investigator

Columbia CTSA Irving Institute (Picard) 9/1/2016 - 3/31/2017 0.12 CM
Columbia CTSA Irving Institute TPE 0.10 CM
Stress Reactivity in Mitochondrial Disease: Preliminary Investigation of Physiological, Neural, and Epigenetic Mechanisms
This Collaborative and Multidisciplinary Pilot Research (CaMPR) Phase II award supports the establishment of the clinical and laboratory infrastructure for the MiSBIE (Mitochondrial Stress, Brain Imaging, and Epigenetics) study.
Role: Co-Investigator

5P01AG02166-10 (WISC) (Ryff) 7/1/2012 - 6/30/2017 1.01 CM
NIH (WISC) TPE 1.20 CM
Integrative Pathways to Health & Fitness
The overall objective of MIDUS is to investigate the role of behavioral, psychological, and social factors in accounting for age-related variations in health and illness.
Role: Subcontract - Principal Investigator

1U19AG051426-01A1 (WISC) (Ryff) 7/25/2016 - 5/31/2021 0.60 CM
NIH (WISC) TPE 0.49 CM
Integrative Pathways to Health & Illness
The overall objective of MIDUS is to study health, broadly defined, as an integrated biopsychosocial process that unfolds across the decades of adult life.
Role: Subcontract - Principal Investigator

W81XWH-14-1-0236 (OC130386) (NCE) (Sloan) 8/1/2014 - 7/31/2017 0.25 CM
DOD TPE 0.30 CM
Hippocampal and Cognitive Function, Exercise and Ovarian Cancer: A Pilot Study
We propose to examine whether carboplatin and paclitaxel-based chemotherapy for ovarian cancer induces cognitive dysfunction and reduced DG CBV and to test whether an individually based walking intervention may attenuate this chemotherapy-induced cognitive and DG dysfunction.
Role: Principal Investigator

5P50AG008702-27 (Small) 6/1/2015 - 5/31/2020 0.12 CM
NIH TPE 0.10 CM
Alzheimer's Disease Research Center
This project supports a wide spectrum of research on Alzheimer's disease.
Role: Co-Investigator

5 R01 AG035015-05 (NCE) (Small/Sloan) 9/15/2010 - 5/31/2017 1.01 CM
NIH/NIA TPE 1.20 CM
Exercise, Age-Related Memory Decline and Hippocampal Function
The goal of this study is to conduct a randomized controlled trial of the effects of aerobic training and cognitive decline and to investigate the role of the hippocampus in mediating this effect.
Role: Multi-Principal Investigator

5 R01 AG033546-05 (NCE) (Stern/Sloan) 9/15/2010 - 5/31/2017 1.52 CM
NIH/NIA TPE 1.80 CM
Exercise, Aging and Cognition: Effect and Mechanisms
The goal of this study is to extend the investigation of the beneficial effects of aerobic exercise to younger individuals, aged 25-40 and 50-65.
Role: Multi-Principal Investigator

Columbia University Pending

NIH (Chang) 7/1/2017 - 6/31/22 0.60 CM
NHLBI/NIH TPE 0.49 CM
Test Of An Alternative ER Management Strategy For Tia Patients; An Explanatory And Guideline-Relevant Rct To Reduce PTSD After Tia And Minor Stroke
This study will evaluate an outpatient treatment strategy for the management of transient ischemic attack (TIA) patients who present to the emergency department (ED).
Role: Co-Investigator

NIH (Cohen) 4/1/2017 - 3/31/2020 0.60 CM
NIH TPE 0.49 CM
Does abdominal fat modify the effect of exercise on bone remodeling?
This proposal aims to establish, in a controlled study, to what extent exercise determines bone turnover based on serum markers. This marker data is required to plan biopsy studies to investigate effects of exercise on re-modeling at the tissue level. We hypothesize that low level of physical activity is an important and modi-fiable contributor to the low bone formation phenotype of abdominal obesity in premenopausal wom-en. We further hypothesize that increased exercise will ameliorate the bone formation defect and, ulti-mately, the bone quality defect found specifically in states of abdominal obesity.
Role: Co-Investigator

NIH (Diaz) 7/1/2017 - 6/30/2022 0.60 CM
NIH TPE 0.49 CM
Breaking up prolonged sitting: a factorial trial to evaluate the efficacy of multiple components of a sitting interruption intervention for improving
This study is designed to investigate the effects of a sitting interruption intervention in real world conditions over an extended period.
Role: Co-Investigator

NIH (Kimhy) 4/1/2017 - 3/31/2021 0.30 CM
NIH TPE 0.24 CM
Individuals with schizophrenia (SZ) display substantial cognitive deficits across multiple domains. These deficits have been identified as major determinants of poor functioning and disability, representing a serious public health concern and an important target for interventions. At present, available pharmacological and cognitive-remediation treatments offer only minimal to limited benefits to ameliorate these deficits. Thus, there remains an urgent need to identify novel treatments for cognitive deficits in people with SZ.
Improving Cognition via Exercise in Schizophrenia
Role: Co-Investigator

PR160029 (Picard) 10/1/2017 - 9/30/2020 0.65 CM
Department of Defense TPE 0.53 CM
Stress Reactivity in Mitochondrial Disease: Physiological, Neural, and Epigenetic Mechanisms
This project will test the hypothesis that mitochondrial dysfunction in patients with the m.3243A>G mutation exhibit abnormal neural connectivity within the brain, which mediates exaggerated neuroendocrine, cardiovascular, and inflammatory responses to psychological stress, and abnormal epigenetic regulation of gene expression.
Role: Co-Investigator

1R01OD024671-01 (Picard) 9/1/2017 - 8/31/2022 1.20 CM
NIH Director's Office TPE 0.98 CM
Mitochondrial and Neural Mechanisms Linking Stress to Disease
The goal of this transdisciplinary proposal is to define new principles of stress regulation in humans, and to explore novel sub-cellular mechanisms for mind-body processes.
Role: Co-Investigator

NIH (Sloan/Small) 4/1/2017 - 3/31/2022 3.00 CM
NIH TPE 2.45 CM
Cocoa Flavanols, Systemic Inflammation, and Dentate Gyrus Function in Aging Adults
We propose to test this mechanism in a study in which healthy older adults will receive cocoa flavanols or placebo daily for a 12- week period, with pre- and post-intervention MRIs to assess the function of this brain region and blood draws. to measure key inflammatory markers.
Role: Principal Investigator

Department of Defense (Sun) 1/1/2017 - 6/30/2018 0.48 CM
Department of Defense TPE 0.39 CM
Structured & Regular Physical Activity in Children with Congenital Heart Diseases Can Enhance Neurocognitive Development
The purpose of this Discovery Award application is to plan and complete all necessary preparations for a future randomized controlled trial (RCT) that will test the hypothesis: “Regular and structured physical activities in young children with congenital heart diseases will improve their neurodevelopmental outcome”.
Role: Co-Investigator

Brickman, Adam **OTHER SUPPORT**

Active

W81XWH-14-1-0236 (Sloan) 08/01/2014 - 7/31/2017 (NCE) 0.30 calendar
DoD
Hippocampal and Cognitive Function, Exercise and Ovarian Cancer: A Pilot Study
In this application, we propose to investigate the possibility that standard chemotherapy regimen used to treat ovarian cancer leads to memory impairment because it arrests the normal processes of neurogenesis, the growth of new nerve cells, in this brain region.
Role on Project: Co-Investigator

R01AG016495 (Au) 09/15/2012 - 06/30/2017 0.12 calendar
NIH
MRI, Genetic and Cognitive Precursors of AD and Dementia
The goals of this study are to identify the most effective method and criteria for diagnosis of mild cognitive impairment (MCI) that are best predictive of incident Alzheimer's disease. Current efforts to treat AD have been ineffective because intervention occurs too late in the insidious process. Increased accuracy of diagnosis at the preclinical stage may be more successful for treatment and prevention efforts.
Role: Co-Investigator

1R01NS076837-01A1 (Cosentino, MPI) 09/21/2012 - 07/31/2017 0.12 calendar
NIH/NINDS
Examination of the Earliest Symptoms and Biomarkers of FTLD MAPT Carriers
This project examines the earliest clinical symptoms of FTLD in carriers of a tau mutation.
Role on Project: Co-investigator

P50AG008702 (Small/Brickman-Project Leader) 06/01/2015 - 05/31/2020 1.35 calendar
NIH/NIA
Alzheimer's Disease Research Center
This project supports a wide spectrum of research on Alzheimer's disease.
Role on Project: Project PI

1U01AG051412-01(Schupf, Lott, Silverman) 10/01/2015 - 09/30/2020 1.80 calendar
NIA
Biomarkers of Alzheimer's Disease in adults with Down Syndrome
The goal of this interinstitutional/collaborative study focuses on a longitudinal and multidisciplinary determination of key biomarkers that are likely to define this progression, including levels and rates of change in blood based biomarkers such as □-amyloid peptides, protein and lipid profiles, and measures of amyloid and tau concentration in cerebrospinal fluid, neuroimaging-based changes and genetic polymorphisms
Role on Project: Co-investigator and Site PI for Massachusetts General Hospital

5R01CA186080-02 (Greenlee) 04/15/2015 - 03/31/2020 0.15 calendar
NCI
Cook for Your Life: Maintaining dietary change among breast cancer survivors
Conduct a 2x2 factorial randomized controlled trial to test the effects of a hands-on nutritional education curriculum on changing dietary behaviors among a diverse population of English- and Spanish-speaking breast cancer survivors who have completed treatment.
Role on Project: Co-Investigator

1RF1AG051556-01(Brickman, Luchsinger, Moreno) 09/30/2015 - 08/31/2020 0.90 calendar
NIA
Interdisciplinary Research to Understand the Interplay of Diabetes, Cerebrovascular disease and Alzheimer's Disease

Brickman, Adam **OTHER SUPPORT**

To conduct studies in humans and mice relating diabetes to Alzheimer's and vascular mechanisms.
Role on Project: Co-PI

R01AG049810 (Bondi) 03/15/2016-02/28/2021 0.90 calendar
NIH
Re-visiting Methods for MCI Diagnosis to Improve Biomarker and Trial Findings
Subcontract site is to provide collaborative support for the aims and goals of the UCSD-based research project
Role on Project: Co-I

1R01AG050440-01A1 (Luchsinger) 09/01/2015 - 05/31/2020 0.90 calendar
NIH/NIA
Diabetes Status and Brain Amyloid in Middle Aged Hispanics
The main goal of this proposal is to study whether diabetes status (type 2 diabetes [referred to as diabetes] and pre-diabetes, compared with normal glucose tolerance [NGT]), is related to increased amyloid ß (Aß) deposition in the brain, one of the culprits of Alzheimer's disease (AD), in a community sample of 150 middle aged Hispanics with a mean age of 63 years.
Role on Project: Co-Investigator

RF1AG054023 (Mayeux) 08/01/2016 - 06/30/2021 0.30 calendar
NIH
Genetic Epidemiology of Cerebrovascular Factors in Alzheimer's Disease
The overall goal of this project is to test hypotheses concerning how genetic variants, cardiovascular risk factors, and cerebrovascular disease predispose to Late Onset Alzheimer’s disease and whether these relationships differ by ethnic group.
Role on Project: Co-Investigator

RF1AG054070 (Manly/Brickman) 09/01/2016 - 07/31/2021 3.00
calendar NIH/NIA
Offspring Study of Mechanisms for Racial Disparities in Alzheimer's Disease
The overall aim of this study is to identify biological and sociocultural mechanisms of racial/ethnic disparities in cognitive function among middle-aged people with and without a parent with Alzheimer’s Disease.
Role on Project: Co-PI

2R56AG034189-06A1 (Brickman) 09/01/2016 – 08/31/2021 1.80 calendar
NIH/NIA
White Matter Hyperintentsities in Aging and Dementia
This project will examine the degree to which small vessel cerebrovascular contributes independently or interactively to the development and clinical expression of AD across racial and ethnic groups. It will provide novel mechanistic insight into the disease and help identify new targets for intervention.

R00AG47963 (Zahodne) 09/01/2016 - 08/31/2019 0.36 calendar
NIH/NIA
Psychosocial protective factors in cognitive and brain aging
Characterizing potential intervention targets to reduce age-related cognitive morbidity in diverse elders is of critical importance to the U.S. aging population. This project aims to determine which positive psychosocial factors (1) buffer the impact of brain pathology on cognition and (2) protect against cognitive decline in older adults of different racial/ethnic backgrounds and with different cognitive abilities.

Pending

Brickman, Adam **OTHER SUPPORT**

PAR-16-365 (Luchsinger) 10/01/2016 - 09/30/2021 0.60 calendar
NIH
Mediterranean Diet in Alzheimer's dementia Prevention (MEDAP)
To conduct a randomized trial comparing the Mediterranean diet vs. health education among 200 persons with prodromal Alzheimer's disease to obtain preliminary data on feasibility and efficacy in preventing cognitive decline
Role on Project: Co-I

PAR-15-349 (Luchsinger) 10/01/2016 - 09/30/2021 1.20 calendar
NIH
Ethnic Disparities in Brain Amyloid and Cognition in Middle Age
To compare disparities in brain amyloid and cognition among late middle aged Hispanics, Non-Hispanic Blacks, and Non-Hispanic Whites in Northern Manhattan.
Role on Project: Co-I

3RF1AG051556-01S2 (Brickman, Luchsinger, Moreno) 10/01/2016 - 08/31/2020 0.30 calendar
NIA
Interdisciplinary Research to Understand the Interplay of Diabetes, Cerebrovascular disease and Alzheimer's Disease
This revision is to add Tau PET imaging to human studies in order to complement animal studies that are examining tau neuropathology.
Role on Project: Co-PI

3R01AG050440-02S1 (Luchsinger) 10/01/2016 - 08/31/2020 0.30 calendar
NIH/NIA
Diabetes Status and Brain Amyloid in Middle Aged Hispanics
This revision proposes to add Tau PET imaging to the ongoing amyloid PET imaging
Role on Project: Co-I

PAR-15-349 (Zahodne) 12/01/2016 - 08/31/2021 1.20
calendar NIH/NIA
Resilience Mechanisms Underlying Racial/Ethnic Disparities in Alzheimer's Disease
Identifying modifiable factors that contribute to racial/ethnic disparities in Alzheimer's disease (AD) is of critical importance to the increasingly diverse U.S. aging population. Using repeat MRI and cognitive assessments across three time points, this study examines how psychological and other resources that differ across race/ethnicity promote resilience at multiple points in the AD pathogenic pathway.
Role on Project: Corresponding PI

R21AG056940 (Brickman) 07/01/2017-06/30/2019 1.44 calendar
NIH/NIA
Cerebral autoregulation, Alzheimer's biomarkers, and white matter hyperintensities
This project will examine the interrelationship among cerebral autoregulation, small vessel cerebrovascular disease, AD cerebrospinal fluid biomarkers, and cognitive functioning in older adults. It will provide novel mechanistic insight into the disease and help identify new targets for intervention or disease prevention.
Role on Project: PI

Parent R01 (Rutherford) 04/01/2017 – 03/31/2022 1.20 calendar
NIH
Trajectories of Healthy Aging: Linking Neuropathology, Emotion, and Late-Life Depression
Role on Project: Co-Investigator

Brickman, Adam **OTHER SUPPORT**

R01AG055299 (Luchsinger) 07/01/2017 – 06/31/2022 1.20 calendar
NIH
Are there ethnic differences in brain amyloid and tau in the seventh decade of life?
To compare the presence of brain amyloid and tau in-vivo between Blacks, Hispanics, and Whites in the seventh decade of life
Role on Project: Co-Investigator

W81XWH-14-1-0236 (Sloan) 08/01/2017 - 7/31/2020 0.30 calendar
DoD
Hippocampal and Cognitive Function, Exercise and Ovarian Cancer: A Pilot Study
In this application, we propose to investigate the possibility that standard chemotherapy regimen used to treat ovarian cancer leads to memory impairment because it arrests the normal processes of neurogenesis, the growth of new nerve cells, in this brain region.
Role on Project: Co-Investigator

Overlap

For New and Competing Applications (PHS 398) – DO NOT SUBMIT UNLESS REQUESTED
For Non-competing Progress Reports (PHS 2590) – Submit only Active Support for Key Personnel

PHS 398/2590 OTHER SUPPORT

Jason D. Wright

ACTIVE

NCI R01 CA169121-01A1 (Wright, PI) 1/1/13-12/31/17 3.0 calendar
National Cancer Institute
The Influence of Hospital Variability on the Management of Cancer-Associated Complications
To evaluate common complications from cancer therapy using administrative data.

W81XWH-14-1-0236 (Sloan, PI) 8/1/14-7/31/16 0.3 calendar
Department of Defense
Hippocampal and Cognitive Function, Exercise, and Ovarian Cancer: A Pilot Study
The major goals of this award are to determine the cognitive effects of exercise in ovarian cancer survivors.

SAC 160066 (Hershman, PI) 5/1/16-4/30/19 1.2 calendar
Susan G. Komen Foundation
Comorbidity, Toxicity, and Breast Caner Survival Among Women On and Off Clinical Trials.
The goal of this project is to examine the effect of comorbidities on survival for women with breast cancer treated on cooperative group trials and in general practice.

OVERLAP

There is no scientific or budgetary overlap on any current project.

PENDING

American Cancer Society 1.2 calendar
Oral Anticancer Drugs: Expense, Access, Adherence, and Safety
To evaluate barriers to use, adherence, cost and comparative effectiveness of tyrosine kinase inhibitors in patients with solid tumors.

SCOTT A. SMALL, M.D.

Other Support

Active

1R01AG035015 (Small/Sloan) 09/15/10-05/31/17 NCE 0.56 CM NIH/ NIA

Exercise, Age-Related Memory Decline, and Hippocampal Function

The goal of this proposal is to conduct a randomized controlled trial of the effects of aerobic training on cognitive decline and to investigate the role of the hippocampus in mediating this effect.

U01 AG016976 (Small) 07/01/98-06/30/19 0.10 CM
University of Washington Subcontract

NACC

Goals are to coordinate activities of Alzheimer's Centers by working with and supplying data to national center.

R01 AG042317 (Abeliovich) 07/01/12-06/30/17 0.26 CM
NIH/NIA

Human induced neuronal stem cell models of familial Alzheimer's disease

To determine the mechanism for altered endosomal trafficking in Familial Presenilin mutant Alzheimer's disease models.

W81XWH-14-1-0236 (Sloan) 8/1/14 - 7/31/17 0.3 CM
DoD

Hippocampal and Cognitive Function, Exercise and Ovarian Cancer: A Pilot Study

In this application, we propose to investigate the possibility that standard chemotherapy regimen used to treat ovarian cancer leads to memory impairment because it arrests the normal processes of neurogenesis, the growth of new nerve cells, in this brain region.

9527 (Abelovich) 09/1/14 - 8/31/17 1.68 CM
Michael J. Fox Foundation

Targeting retromer dysfunction: a convergent mechanism in familial and sporadic PD

The overarching goals of the present proposal are A.) To further detail mechanisms by which LRRK2 and other PD-related genes regulate vesicular trafficking in cells, and identify potential therapeutic targets and B.) To develop in vitro and in vivo models and tools, including drug-like reagents, for further studies regarding potential therapeutic targets such as VPS35.

Agreement #46560 (Small) 01/14/2013-12/31/2016 0.6 CM
Anonymous

In vivo validation of the retromer complex as a key component of Alzheimer's disease etilogy

Establish a link between retromer dysfunction and tau toxicity.

1R01MH093398 (Small) 09/22/11-06/30/22 0.60 CM
NIMH

Longitudinal Imaging of Patients at Clinical Risk for Psychosis

In this proposal we will use a variant of functional brain imaging that can detect disease-associated dysfunction in small regions of the brain and apply this to patients at clinical risk for psychosis who are followed prospectively for clinical and brain imaging outcomes. The main project goal is to definitively test the hypothesis of hippocampal hyperfunction as a pathogenic driver in schizophrenia and related disorders.

P50 AG08702 (Small) 09/29/89-05/31/20 1.16 CM
NIH/NIA

Alzheimer's disease Research Center

This project supports a wide spectrum of research on Alzheimer's disease.

Pending

n/a

Overlap

There is no scientific overlap between any of the grants listed above and the application under consideration. If the pending grants are funded, efforts will be adjusted accordingly.